

WISCONSIN AIR TOXIC RULES

NEW REQUIREMENTS IN CHAPTER NR 445 FOR REDUCING PARTICULATE EMISSIONS FROM STATIONARY DIESEL ENGINES

In July 2004, the DNR updated its hazardous air pollutant rule to better protect health and the environment and for the first time included requirements to reduce diesel emissions from engines at stationary sources. Engines burning diesel fuel emit a complex mixture of air pollutants including fine particulate matter, ozone-forming nitrogen oxides and hazardous air pollutants. These pollutants can cause serious public health problems, especially for children and the elderly, and worsen ground level ozone concentrations.

The DNR estimates over 300 sources using stationary diesel engines may be affected by these new requirements including asphalt plants, crushing operations and other industries with generators. This fact sheet is intended to help people understand these new requirements.

I need to understand the new regulation if ..

I own or operate a compression ignition engine burning fuel oil to provide power or to generate electricity at a stationary source. There are **exceptions** for engines that are:

- rated less than 100 horsepower
- used in a truck, bus or recreational vehicle
- used to power mobile equipment in the construction, agricultural and airport service industries (nonroad engines)
- used to provide an essential service (e.g., response to flood or fire) or to provide temporary power during times that a regulated engine is being repaired or replaced.

What does the new regulation include?

- Fuel requirements for all engines subject to the new regulation.
- Control requirements for engines that stay or intend to stay in one place for 12 months and burn or intend to burn 10,000 gallons of fuel oil during that time.
- Recordkeeping and reporting requirements.

See *Compliance at a Glance* Tables 1 and 2 below for a summary of these new requirements.

fuel requirement - fuel oil purchased after July 14, 2006, for use in a regulated engine must have a sulfur content equal to or less than what is allowed by federal law for on road vehicles. **Records** showing the date fuel was purchased, its sulfur content and how much fuel is burned per month need to be kept on site under this regulation.

control requirement - regulated engines have particulate control equipment based on the size of the engine and year it was manufactured or last rebuilt. **Records** related to maintaining both the engine and the control equipment must also be kept on site.

reporting requirement - an owner or operator of an engine manufactured or last rebuilt **prior to July 1, 2006**, and subject to control equipment must submit an initial notification to the DNR **by July 1, 2007** (*Form soon to be available on Air website*). Additional notifications are necessary if the control equipment is replaced or required by permit.

How does the new regulation affect my operation permit?

Fuel requirements, applicable emission standards, recordkeeping and reporting requirements will be added to your operation permit the first time it is renewed **after July 1, 2007**.

What if I do not have an operation permit?

The new regulation does not require the owner or operator of an engine manufactured or last rebuilt **before July 1, 2006**, to get an operation permit if they do not otherwise need one under Chapter NR 407. Engines manufactured or rebuilt **on or after July 1, 2006**, using *Best Available Control Technology* (BACT) need to apply for and receive a permit under Chapter NR 406 prior to operation. Requirements defining BACT will be established during the permit process and will eventually be placed in an operation permit for the source.

Compliance at a Glance

Tables 1 and 2 below outline compliance requirements by engine manufacture or engine rebuilt date and apply to any engine that stays or intends to stay in a single location for any 12 consecutive month period and combusts or intends to combust more than 10,000 gallons of fuel over that period of time.

Table 1 - Requirements for Engines Manufactured or Rebuilt Prior to July 2006

Date	Before 1/1/1995		1/1/1995 to 6/30/2006
Size 100 to 750 Hp	85% control of particulate emissions	Emission Limit of 0.10 g/bhp-hr* * grams per brake horsepower-hour	Emission Limit of 0.10 g/bhp-hr
> 750 Hp	85% control of particulate emissions	Emission Limit of 0.03 g/bhp-hr	Emission Limit of 0.03 g/bhp-hr
Certification Option	Direct Test	Third Party Certification	Third Party Certification
Notification (Keep a copy on site with the engine)	Submit a.-i. information and results of emission test by June 30, 2007 (see list below).	Submit a.-L. information by June 30, 2007 (see list below).	Submit a.-L. information by June 30, 2007 (see list below).
Permit Conditions	If you have operating permit compliance requirements they will most likely be rolled into your permit when it is renewed.		
Recordkeeping	<ul style="list-style-type: none"> Keep maintenance records on any particulate matter emissions control device Keep monthly cost of rebuilding any CI diesel engine 		

Table 2 - Requirements for Engines Manufactured or Rebuilt After July 2006

Date	7/1/2006 to 6/30/2010		On or After 7/1/2010	
Size ≥ 100 Hp	Apply BACT	Emission Limit of 0.03 g/bhp-hr* * grams per brake horsepower-hour	Apply BACT	Emission Limit of 0.01 g/bhp-hr
Certification Option		Third Party Certification		Third Party Certification
Notification (Keep a copy on site with the engine)	Submit construction permit application.	Submit a.-L. information within 10 days of startup (see list below).	Submit construction permit application.	Submit a.-L. information within 10 days of startup (see list below).
Permit Conditions	Compliance requirements initially established in your construction permit.	If you have operating permit compliance requirements they will most likely be rolled into your permit when it is renewed.	Compliance requirements initially established in your construction permit.	If you have operating permit compliance requirements they will most likely be rolled into your permit when it is renewed.
Recordkeeping	<ul style="list-style-type: none"> Keep maintenance records on any particulate matter emissions control device Keep monthly cost of rebuilding any CI diesel engine 			

Notification Details

- your company name, contact name, phone number and address of the owner or operator of the engine
- the location of the engine
- the name of the engine manufacturer
- the make, model and serial number of the engine
- the date the engine was manufactured or last rebuilt
- the maximum rated horsepower of the engine
- the date the control device was first put into operation
- the name of the control device manufacturer
- the product or model name of the control device
- the manufacturer's performance warranty for the control device expressed as a particulate matter emission rate in grams per brake horsepower-hour
- the test method used by the manufacturer to determine the particulate matter emission rate in the manufacturer's performance warranty for the control device
- the certifying agency for the control device

Additional Information

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